Coastal Ecosystems - continued

D. Tidal Freshwater
Tidal freshwater systems occupy the upper ends of estuaries and are composed of tidal marshes, tidal swamps, and associated riverine conveyances (rivers, streams, and headwaters) (Fig. 3). These wetlands generally receive sufficient freshwater flows to keep surface water salinities less than 0.5 (Cowardin et al., 1979). Few ecosystems exist in a more vulnerable location for shifts in salinity and flood regime than tidal freshwater wetlands (Doyle et al., 2007). Differences in community type, swamp versus marsh, were clearly related to the penetration of saline water into swamps (Hickney et al., 2007).

E. Coastal Impoundments
Drought impacts are the most vulnerable. Carolina bays and poconos are dependent upon direct precipitation and evaporative water loss can result in the complete drying of shallow bays. Any deviation from normal precipitation will have an impact on their hydrodynamics (Sun et al., 2006).

F. Non-Alлюvial Wetlands
The vulnerability of these wetlands to drought depends, in large part, on the sources of their water supply. Those fed by precipitation are the most vulnerable. Carolina bays and poconos are dependent upon direct precipitation and evaporative water loss can result in the complete drying of shallow bays. Any deviation from normal precipitation will have an impact on their hydrodynamics (Sun et al., 2006).

G. Coastal Upland Forests
Several studies in upland pine forests indicate that drought reduces root production and photosynthetic rates. Drought may also affect mass production thereby reducing forage for numerous wildlife species.

References

The full report can be downloaded as a pdf from: http://www.cisa.sc.edu/resources.html

Acknowledgements
This report was supported by the National Integrated Drought Information System (NIDIS) and the NOAA Climate Program Office, Regional Integrated Sciences and Assessments program.